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with main body 12, any number of orthopaedic augments 14 may be provided for use with main body 12, for example at least one, two, three, or four or more. Further, as can be seen in FIGS. 1 and 2, the orthopaedic augment 14 can have varying thickness throughout the augment 14. For example, the orthopaedic augment 14 can have a first portion adjacent to the periphery of the orthopaedic augment 14 with a first thickness and a second portion adjacent to a solid post of the orthopaedic implant 10, which extends away from the main body 12 past the porous ingrowth surface 20, having a second thickness which is less than the first thickness of the first portion of the orthopaedic augment 14. The orthopaedic augment 14 having a varying thickness throughout can provide differing amounts of material to be cut, in a direction from the periphery toward the solid post, by a surgeon during a revision surgery.

Orthopaedic augment 14 is removably attachable with main body 12 by a mechanical apparatus, adhesion or bonding. For example, as illustrated in FIGS. 1 and 2, orthopaedic augment 14 is removably attached to main body 12 using fasteners 24, for example screws 24 including a plurality of threads 26 adapted to thread into a respective threaded hole or opening 28 in main body 12. In this embodiment, orthopaedic augment 14 includes a bore 30 through which fastener 24 is passed, bore 30 being positioned to correspond with opening 28 in main body 12. Bore 30 may be formed with a counter-sink to accommodate the fasteners 24, for example in the case of a screw, such that the screw head is positioned flush with or below the surface of the augment 14. Any number of fasteners 24 and corresponding bores 30 and threaded openings 28 may be provided for implant 10. Fasteners 24 are also formed of a biocompatible material, for example, PEEK, or any known biocompatible polymeric material or metallic material.

Referring now to FIGS. 3 and 4, there is shown an additional embodiment of the orthopaedic implant according to the present invention in the form of a femoral implant 10'. Femoral implant 10' includes main body 12 and a pair of orthopaedic augments 14. Main body 12 is shown here as including an optional porous layer 16, as described more fully above with respect to the implant 10, illustrated in FIGS. 1 and 2. In FIGS. 3 and 4, orthopaedic augments 14 are removably attached to main body 12 using a pair of fasteners 24 (screws 24) inserted through corresponding bores 30. Screws 24 again include threads 26 adapted to thread into a respective threaded opening 28 in main body 12. Although the orthopaedic augments 14 of the present invention are shown in FIGS. 3 and 4 as being positioned on a posterior surface 30 of main body 12 with a corresponding screw 24, the positioning of the orthopaedic augments 14 within main body 12, as well as the number of fasteners 24 utilized for securing orthopaedic augments 14 to main body 12, are unrestricted. For example, referring now to FIG. 5, an orthopaedic implant in the form of a femoral implant 10'', is shown including main body 12 with porous layer 16, to which a pair of porous orthopaedic augments 14 are each attached with a single fastener 24 in the form of a centrally positioned stake or post 24 on a distal surface of main body 12.

The present orthopaedic augment and orthopaedic implants according to the present invention allow for bone ingrowth, such that should subsequent revision surgery be required, the combination of added bone material and porous augment may be cut through, as opposed to sacrificing more bone during the course of each successive surgery. The orthopaedic augment and orthopaedic implants of the present invention may be utilized for purposes of any primary or revision orthopaedic surgery.

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While this invention has been described with respect to at least one embodiment, the present invention can be further modified within the spirit and scope of this disclosure. This application is therefore intended to cover any variations, uses, or adaptations of the invention using its general principles. Further, this application is intended to cover such departures from the present disclosure as come within known or customary practice in the art to which this invention pertains and which fall within the limits of the appended claims.

What is claimed is:

1. An orthopaedic augment, comprising a porous material removably attachable to an interface surface of a medical implant, said porous material having a bone ingrowth surface for interfacing with an existing bone material and another surface for interfacing with said medical implant, said medical implant including a post extending from said interface surface past said bone ingrowth surface of said porous material, said post having a solid exposed surface.

2. The orthopaedic augment according to claim 1, wherein said porous material is removably attached to said medical implant with at least one fastener.

3. The orthopaedic augment according to claim 2, wherein said fastener is formed from polyether ether ketone (PEEK).

4. The orthopaedic augment according to claim 2, said at least one fastener being configured to thread into an opening on said medical implant.

5. The orthopaedic augment according to claim 1, wherein said porous material is one of a polymer scaffold, allograft bone, autograft bone, and cuttable metal scaffold.

6. The orthopaedic augment according to claim 5, wherein said porous material is a polymer scaffold, said polymer scaffold being formed from polyether ether ketone (PEEK).

7. An orthopaedic implant, comprising:

a main body having an interface surface;

a porous augment removably attached to said interface surface of said main body, said porous augment having a bone ingrowth surface for interfacing with a bone material and another surface coupled with said main body; and

a post extending from said interface surface of said main body past said bone ingrowth surface of said porous augment, said post having a solid exposed surface.

8. The orthopaedic implant according to claim 7, wherein said porous material is removably attached to said main body with at least one fastener.

9. The orthopaedic implant according to claim 8, wherein said at least one fastener is formed from polyether ether ketone (PEEK).

10. The orthopaedic implant according to claim 7, said porous augment being formed from one of a polymer scaffold, allograft bone, autograft bone, and cuttable metal scaffold.

11. The orthopaedic implant according to claim 10, wherein said porous augment is a polymer scaffold, said polymer scaffold being formed from polyether ether ketone (PEEK).

12. The orthopaedic implant according to claim 7, wherein said main body includes a porous layer of material to which said other surface of said porous augment is coupled.

13. The orthopaedic implant according to claim 7, wherein said main body is one of a tibial tray and a femoral implant.

14. The orthopaedic implant according to claim 13, wherein said main body is a femoral implant and said porous augment is removably attached with said femoral implant using a post.

15. The orthopaedic implant according to claim 7, wherein said porous augment has at least two thicknesses.